

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Michele COVELL, et al.

Confirmation No.:

Application No.: 10/698,812

Examiner:

Filing Date: 10/30/03

Group Art Unit:

Title: SYSTEM FOR DOING SERVICE LOCATION MANAGEMENT TAKING INTO ACCOUNT
THE NODE AND NETWORK CHARACTERISTICS

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before
mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the 37 CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:
☐ Statement under 37 CFR 1.97(e)(1) or (2), and
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00 . At any time during the
pendency of this application, please charge any fees required or credit any overpayment to Deposit
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☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with
any required copies of patents, publications or other information of which applicant(s) are aware, which
applicant(s) believe(s) may be material to the examination of this application and for which there may be
a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications
and other foreign language information listed on PTO Form 1449, as presently understood by the
individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the
attached sheet, or where a foreign language patent is cited in a search report or other action by a
foreign patent office in a counterpart foreign application, an English language version of the search
report or action which indicates the degree of relevance found by the foreign office is listed on form PTO
1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

☒ I hereby certify that this correspondence is being
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Respectfully submitted,

Michele COVELL, et al.

By _____

John P. Wagner, Jr.

Attorney/Agent for Applicant(s)

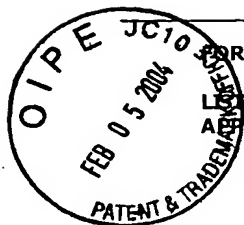
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**LIST OF PATENTS AND PUBLICATIONS FOR
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STATEMENT**

(Use several sheets if necessary)

ATTY. DOCKET NO.

200313228-1

APPLICATION NO.

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GROUP

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | PUBLICATION DATE | NAME | Pages, Columns, Lines Where Relevant Passages or Figures Appear |
|---------------------|----|--------------------|---------------------|-------------------|--|
| | 1A | 6,516,350 | Feb. 4, 2003 | Lumelsky, et al. | |
| | 1B | 6,442,165 | Aug. 27, 2002 | Sitaraman, et al. | |
| | 1C | 5,937,388 | Aug. 10, 1999 | Davis, et al. | |
| | 1D | 6,055,433 | Apr. 25, 2000 | Yuan, et al. | |
| | 1E | 6,463,454 | Oct. 8, 2002 | Lumelsky, et al. | |
| | 1F | 2003/0046396 | Mar. 6, 2003 | Richter, et al. | |
| | 1G | 2002/0152305 | Oct. 17, 2002 | Jackson, et al. | |
| | 1H | | | | |
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FOREIGN PATENT DOCUMENTS

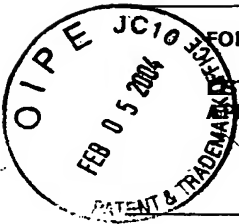
| | | DOCUMENT NUMBER | PUBLICATION DATE | NAME OF PATENTEE OR APPLICANT | Pages/Columns/Lines Where Relevant Passages/Figures Appear | Check if Translation attached |
|--|----|--------------------|---------------------|----------------------------------|---|-------------------------------------|
| | 1L | EP1035718A1 | 13/09/2000 | Lucent technologies | | |
| | 1M | WO02/058396 | 25/07/2002 | Streamworks Tech | | |
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

| | | |
|--|----|--|
| | 1Q | "INTERNET STREAMING MEDIA ALLIANCE IMPLEMENTATION SPECIFICATION", Version1.0; August 28, 2001; Internet Streaming Media Alliance (ISMA); 68 pages. |
| | 1R | M. Handley, et al.; "SDP: SESSION DESCRIPTION PROTOCOL"; copyright: The Internet Society (1998); April 1998; 40 Pages. |
| | 1S | Don Box, et al.; "SIMPLE OBJECT ACCESS PROTOCOL (SOAP) 1.1"; May 8, 2000; W3C; 35 pages. |

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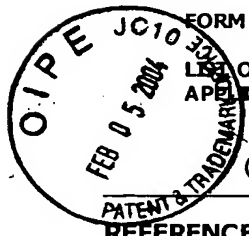
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|----|--|
| 1Q | H. Schilzrinne, et al.; "REAL TIME STREAMING PROTOCOL (RTSP)"; copyright: The Internet Society (1998); April 1998; 87 pages. |
| 1R | H. Schilzrinne, et al.; "RTP: A TRANSPORT PROTOCOL FOR REAL-TIME APPLICATIONS"; 70 Pages. |
| 1S | A. Babir, et al.; "OPES USE CASES AND DEPLOYMENT SCENARIOS draft-ietf-opes-scenarios-01" copyright: The Internet Society (2002); August 5, 2002; 16 pages. |

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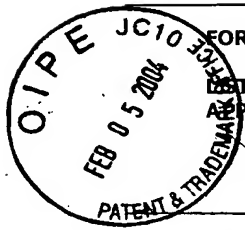
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| 1Q | Elan Amir, et al.; "AN ACTIVE SERVICE FRAMEWORK AND ITS APPLICATION TO REAL-TIME MULTIMEDIA TRANSCODING"; available at www.net-tech.bbn.com/smtpkts/baltimore/index.html ; 12 pages. |
| 1R | Michael Harville, et al.; "AN ARCHITECTURE FOR COMPONENTIZED, NETWORK-BASED MEDIA SERVICES"; Hewlett-Packard Laboratories, Palo Alto, CA; 7 pages. |
| 1S | Michael Harville, et al.; "AN ARCHITECTURE FOR COMPONENTIZED, NETWORK-BASED MEDIA SERVICES" Streaming Media Systems Group, HP Labs, Palo Alto, CA ; 4 pages. |

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

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|----|---|
| 1Q | Takeshi Yoshimura, et al.; "MOBILE STREAMING MEDIA CDN ENABLED BY DYNAMIC SMIL"; May 7-11, 2002; Honalulu, Hawaii; pages 651-661. |
| 1R | Susie J. Wee, et al.; "FIELD-TO-FRAME TRANSCODING WITH SPATIAL AND TEMPORAL DOWNSAMPLING"; IEEE International conference on Image Processing, Kobe, Japan, October 1999; 5 pages. |
| 1S | Sumit Roy, et al.; "APPLICATION LEVEL HAND-OFF SUPPORT FOR MOBILE MEDIA TRANSCODING SESSIONS"; NOSSDAV 2002, May 12-14, 2002, Miami, Florida; 10 pages. |

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

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| 1Q | Sumit Roy, et al.; "IMPLEMENTATION OF AN ALGORITHM FOR FAST DOWN-SCALE TRANSCODING OF COMPRESSED VIDEO ON THE ITANIUM"; Hewlett- Packard Laboratories, Palo Alto, CA ; 8 pages. |
| 1R | 3GPP TS 26.244 V0.1.2 (2003-02-19); 3rd Generation Partnership Project: Technical Specification Group Services and System Aspects Transparent end-to-end packet switched streaming service (PSS); 3GPP file format (3GP) (Release 6). |
| 1S | 3GPP TS 26.234 V5.0.0 (2000-03); 3rd Generation Partnership Project: Technical Specification Group Services and System Aspects; Transparent end-to-end packet switched streaming service (PSS); Protocols and codecs (Release 5). |

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| 1Q | A. Babir, et al.; "AN ARCHITECTURE FOR OPEN PLUGGABLE EDGE SERVICES (OPES) draft -ietf-opes-architecture-04"; copyright: The Internet Society (2002); December 11, 2002; 22 pages. |
| 1R | Wei Tsang Ooi, et al.; "DESIGN AND IMPLEMENTATION OF PROGRAMMABLE MEDIA GATEWAYS"; Department of Computer Science, Cornell University, Ithaca, NY; 8 pages. |
| 1S | Wei-Ying Ma, et al.; "CONTENT SERVICES NETWORK: THE ARCHITECTURE AND PROTOCOLS"; 9 Pages. |

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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

| | | |
|--|----|--|
| | 1Q | Roger Karrer, et al.; "DYNAMIC HANDOFF OF MULTIMEDIA STREAMS"; Institute of Computer Systems, ETH Zurich; 5 pages. |
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